Cornetto is a lexical resource for Dutch and includes both the data of RBN (Referentie bestand Nederlands) and DWN (Dutch WordNet). It includes a set of lexical entries (LEs) and a set of synsets related to each other. It can be seen as a combination of a dictionary and a thesaurus.

The data can be accessed in one of the following ways:

- **Simple Search for Lexical Entries**
  Just type a word and look up the meaning of the lexical entries and their (morpho)-syntactic, semantic and combinatorial properties. If you scroll down you can see also their place in the synset hierarchy.

- **Advanced Search for Lexical Entries**
  Permits you to select specific lexical entries from the resource by choosing and combining its linguistic properties.

- **Synset visualization**
  Look up a word and get it visualized in a wordnet structure.

The descriptions of the different screens in this document are also available under the HELP button of each individual search modus.

- A **wordnet** groups lexical entries into sets of synonyms called synsets. It records relations between these synsets of which the most important are hypernym and hyponym relations. **Hypernym** relations point at broader concepts (e.g. animal is a hypernym of horse) and **hyponym** relations point at narrower concepts (e.g. rose is a hyponym of plant.)

- A **synset** is a set of lexical entries that are synonyms of each other. Synsets are the basic units of a wordnet and they are linked to each other by all kinds of relations.

- A **lexical entry** is a combination of a word and its meaning. So, the Dutch word toren in its meaning of a building (tower) is one lexical entry and toren in its meaning of chess piece (rook) in is another one.

- **TIP:** if you want to know more about the linguistic concepts you find, then please move your cursor over the field names to find an explanation. For more details, go to the Cornetto User Documentation (pp. 8-30) (http://cornetto.inl.nl/help/D9-Cornetto-Documentation.pdf)
Simple Search for Lexical Entries

Begin a new search by typing a word or phrase into the text field and then clicking "Search" or pressing Return. The form for Simple Search consists of an input field for text in which a word form can be entered. The user can specify the word class (Part of Speech - POS) for the results (noun, verb or adjective) and he can select the number of results that should be displayed per page. The Simple Search allows the use of wild-cards:

- An asterisk will match any (sub)string
- A question mark will match any single character
- This example will match all words that end with "vogel"
- This example will match all words that begin with "open"
- This example will match with words like "lopen", "kopen", "dopen", etc.

For example, the you want to search for words ending with ‘gebak’, by typing in ‘*gebak’ and clicking on the checkbox ‘Use Wild-cards’.

The result set is only visible if a query has been submitted. If the query results in an empty set, the user is informed about that and is advised to revise the search parameters. If the result set is not empty, a table is shown with one row per found lexical entry. Several characteristics are displayed per column. If multiple Examples are available per cell of the table, only the first value is shown with an indication of the number of remaining elements not shown.
Since the results are shown in pages, the maximum length of the table is the number of items previously selected in the form. There are also buttons that allow the user to page forward or backward. **Click on the left file tab to return to the form.**

**Clicking on a row of the table shows the details of the lexical entry.** All available information from the data is displayed in this part. The data fields have been grouped in order to make the presentation more compact and clearer. **Move your cursor to the fields to show the explanation of the terms in a tooltip.** The hierarchic information of the corresponding synset is also provided. The marked synset in the hierarchy is the current one. In this example ‘clubhuis’ is marked.

<table>
<thead>
<tr>
<th>Hierarchy</th>
</tr>
</thead>
<tbody>
<tr>
<td>onderkomen-n-1 verblijf-n-2 verblijfplaats-n-1</td>
</tr>
<tr>
<td>bouwwerk-n-1</td>
</tr>
<tr>
<td>gebouw-n-1 huis-n-3 pand-n-1 perceel-n-1</td>
</tr>
<tr>
<td>clubgebouw-n-1 clubhuis-n-1</td>
</tr>
</tbody>
</table>

The nodes that are indented to the left are hypernyms and those indented to the right are hyponyms. When you click on a square box, next to the LE in the hierarchy, the related Synset with detailed synset information will display in a new file tab. When you click on the circle, you jump to the related visualization. Links to other lexical entries are also available. **Clicking on these will display the entry in a new file tab.** Click on the left file tab to return to the Form.

**TIP:** if you want to know more about the linguistic concepts you find, then please move your cursor over the field names to find an explanation. For more details, go to the Cornetto User Documentation (pp. 8-30) (http://cornetto.inl.nl/help/D9-Cornetto-Documentation.pdf)

**TIP:** There is also an option available to download the selected items. You can click on the button and then download the file. The data are available on the Cornetto-LMF xml format. You can find more about this format in the Cornetto User Documentation (pp. 36-38)

**TIP:** The number of items that can be downloaded is limited to 500 items. If you want to have more data then please go to and download the complete resource http://wordpress.let.vupr.nl/odwn/data/
**Advanced Search**

**TIP:** If you want to know more about the linguistic data categories you can choose, please read the Cornetto User Documentation (pp. 8-30) [http://cornetto.inl.nl/help/D9-Cornetto-Documentation.pdf](http://cornetto.inl.nl/help/D9-Cornetto-Documentation.pdf)

**TIP:** You can always start a fresh query choosing the tab ‘advanced search’ again and hit the button ‘clear’

**TIP:** The results of your queries can be downloaded but the number of items that can be downloaded is limited to 500. If you want to have more data then please go to and download the complete resource [http://wordpress.let.vupr.nl/odwn/data/](http://wordpress.let.vupr.nl/odwn/data/)

The **Advanced Search** form permits you to select specific lexical entries from the resource. All properties of the lexical entries can be used as selection criteria. Since in Advanced Search there are many options available, they are grouped in sections. The sections are distributed over three rows on the screen, and every section can be collapsed or closed by clicking on the circle.

Two methods are used for the user to enter options. If there is a closed set of values for a parameter, a select list is used which allows one selection. If the set of values for a parameter is open (any string), then a text field will be available in which the user can specify a fixed string or he can make use of wild cards. In the screenshots below a select list is shown left and a text field is shown right.

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Advanced search for lexical entries
Further, the user can select the number of result that will be displayed on a page and there is an option available to clear the complete form.

For example, the user wants to search for all the words in the Dance domain. Then he has to select ‘Dance’ in the pragmatic section (Domain). (78 entries will be found). If he wants to select only the verbs of the Dance domain he adds a constraint on Part-of-speech in the syntax section:

These selection criteria will give 14 results:
Clicking on a row of the table shows the details of the lexical entry. Click on the left file tab to return to the form. There is also an option available to download the selected items as LMF-XML.
Synset Visualization

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A **synset** is a set of lexical entries that are synonyms of each other. Synsets are the basic units of a wordnet and they are linked to each other by all kinds of relations.

A **lexical entry** is a combination of a word and its meaning. So, the Dutch word *toren* in its meaning of building (*tower*) one lexical entry and *toren* in its meaning of chess piece (*rook*) in is another one.

With the synset visualization tool you can look up words in the Dutch wordnet. It is very easy to use the visualization tool: type in the word and press enter to see the word web. The grey squares indicate the Synset-IDs and the colored dots indicate the Lexical Entries (LEs). The colors correspond with the part-of-speech. For example, if you search for ‘arm’, you’ll see blue words that indicate the nouns and yellow words that indicate the adjectives (see screenshot below). The **striped lines** between the nodes indicate the hyponym relations and the **orange lines** indicate the hypernym relations. **Yellow lines** indicate other relations, for example near synonyms. It is possible to **drag the lines** to a different location on your screen by grabbing the nodes. It is also possible to **click on a grey node** to see the visualization for that particular synset. **Move your cursor** on the nodes to show more information about the LEs or the synsets. If you want to **zoom in** for a close-up on parts of the results then use the scroll wheel; and if you want to **pan or move** the figure across the screen then drag the background.
When you look up a word that has different meanings, you will only see a representation of its first meaning. For the visualization of the other meanings you have to select the part-of-speech and/or the desired Sense number in the form. You can find the sense numbers via the Simple Search or just try one.

If you have selected a synset with a lot of relations (you could try plant), you may get confused by the amount of information you get. The other synset representation available through the Simple Search modus may be more useful in that case.